

STATE OF WASHINGTON

INDEPENDENT SCIENCE PANEL

PO Box 43135
Olympia, Washington 98504-3135

*Kenneth P. Currens, PhD
Hiram W. Li, PhD
John D. McIntyre, PhD
Walter F. Megahan, PhD
Dudley W. Reiser, PhD*

August 31, 2006

The Honorable Christine Gregoire
Governor of Washington
PO Box 40002
Olympia, WA 98504-0002

The Honorable Lisa Brown
Majority Leader of the Senate
PO Box 40403
Olympia, WA 98504-0403

The Honorable Frank Chopp
Speaker of the House
PO Box 40600
Olympia, WA 98504-0600

Dear Governor Gregoire, Senator Brown and Representative Chopp:

The Independent Science Panel (ISP) was created by the Legislature in 1998 to provide scientific review and oversight, and help ensure that sound science is used in Washington's salmon, steelhead, and trout recovery efforts (77.85.040 RCW). The ISP's findings are to be provided periodically to the Governor and the Legislature.

In a memo dated April 7, 2006 the Governor's Salmon Recovery Office asked us to review the draft "*Study Plan for the Intensively Monitored Watershed Program*," and respond to a series of questions related to the plan's technical strengths, shortcomings, and opportunities for improvement.

In June 2003, the Salmon Recovery Funding Board (SRFB) initiated funding of an Intensively Monitored Watershed (IMW) program to evaluate whether habitat restoration projects and activities done over a whole watershed would affect an increase in the abundance of out-migrating juvenile salmon.

Creating one or more IMWs in Washington to determine the response of salmon populations to habitat restoration was a key recommendation of *The Comprehensive Monitoring Strategy and Action Plan for Watershed Health and Salmon Recovery*, which was requested by the Legislature in 2001. The recommendation was intended to address an important policy and scientific question: “How can we be confident that habitat restoration projects will be effective in increasing salmon populations?”

After a detailed review, we find that the draft IMW study plan is designed as a comprehensive effort that could represent the beginning of a state-of-the-art intensive monitoring program to test and validate salmon habitat restoration strategies at the watershed scale. The strengths of the draft plan are its solid scientific conceptual framework, fundamentally robust study designs, and a well-qualified interagency team of scientists working to develop and refine the experimental designs and implement the monitoring. Given the opportunities currently available for initiating IMWs, the choices of species and watersheds/complexes seem appropriate.

Notwithstanding those strengths however, some unresolved issues and a lack of information in the draft study plan hamper our ability to offer a definitive conclusion about how well the program will be able to meet its objectives. Serious weaknesses include the apparent disconnect between how treatments (i.e., the restoration actions) are selected and funded in relation to experimental design and IMW monitoring needs, and uncertainty about the duration of the commitment to fund the long-term nature of the IMW program. In addition, information on data management, standards, and quality assurance was not included in the draft plan, nor was it clear how results of IMW work are intended to guide in decision-making processes.

Although much more detail is included in our report, we below summarize four groups of key recommendations below that if addressed, in conjunction with the points discussed above, should significantly improve the likelihood that the IMW program will achieve its objectives:

1. Develop specific, detailed study plans for each study component and IMW complex, including statistical power analysis and other aspects related to the individual project objectives. To improve the ability to test and generalize about the efficacy of habitat restoration approaches, work cooperatively to develop and implement meta-analyses by coupling the results of the SRFB-funded IMW program with other IMW efforts in Washington and across the Pacific Northwest. Describe organization structures that will meet the program’s objectives.
2. Clarify expectations about what to expect from generalizing results from results the IMW plan to other watersheds. The most immediate importance of the IMW work may be to provide a valuable series of case studies from which qualitative generalizations can be applied to other areas.

The Honorable Christine Gregoire
The Honorable Lisa Brown
The Honorable Frank Chopp
August 31, 2006
Page 3

3. Develop mechanisms to ensure coordination of restoration actions within IMW complexes that are appropriately chosen and implemented at a large enough scale to be able to detect a response or lack of response consistent with the experimental design.
4. Support the collaborations that already exist between the SRFB-funded IMW program and similar efforts funded by other agencies in the Pacific Northwest and expand this collaboration.

The results of this review are contained in our report "*Review of Study Plan for the Intensively Monitored Watershed Program*" (April 26, 2006 review draft) (ISP Report 2006-1) (enclosed). Copies of the report have been provided to the Governor's Salmon Recovery Office, the Salmon Recovery Funding Board, the Governor's Forum on Monitoring Salmon Recovery and Watershed Health, and the authors of the IMW study plan.

We are optimistic that our comments on the SRFB-funded IMW program will also inform IMW efforts funded by other entities, and that the growing interest in IMWs across the Pacific Northwest will contribute substantively toward improved understanding of how investments in habitat restoration actions benefit salmon and their recovery for the citizens of Washington State.

As always, we hope our work will be of value to you in your continuing efforts toward salmon recovery and watershed health.

Please contact us if you have questions about any aspect of these comments.

Sincerely,



Kenneth P. Currens, Chair

Enclosure

cc: Senator Ken Jacobsen, Chair, Senate Natural Resources, Ocean & Recreation
Committee
Representative Brian Sullivan, Chair, House Natural Resources, Ecology & Parks
Committee
Mr. William Ruckelshaus, Chair, Salmon Recovery Funding Board